Bethesda Hospitals' Emergency Preparedness Collaborative: A Regional Model for National Responsiveness

National Naval Medical Center
National Institutes of Health, DHHS
Uniformed Services University for the Health Sciences
Suburban Hospital Healthcare System

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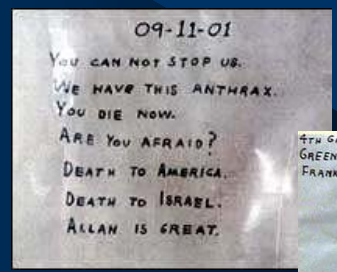
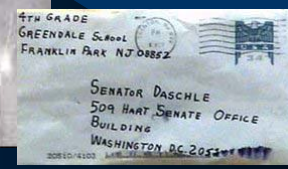
Motivation?

- Events of September 11th, anthrax exposures, ongoing threats;
- Healthcare organizations have well-formulated *individual* emergency response plans;
- Drills and real emergency responses indicate communication and collaboration are often the weakest links in the response;
- Increased interest by community and federal hospitals in responding in concert – effectively, efficiently and collaboratively;
- Outside resources available to support these "non-mission" activities.





The Partnership

- National Naval Medical Center
- Suburban Hospital Healthcare System
- Uniformed Services University for the Health Sciences
- Clinical Center, National Institutes of Health, DHHS

The Vision

The BHEPP will provide a comprehensive, transferable model. This template includes the following elements:

- Tools to guide the assessment of existing organizational assets;
- Tools to identify required resources (e.g. workforce/ human resources needs, decontamination facilities, required patient care equipment and supplies, and initial and ongoing training/education needs);
- Strategies for maintaining and/or enhancing existing response processes;
- Strategies for sustaining collaborative readiness,
- Objective measures and methods for quantifying the success and exportability of the program.

Potential Benefits…

- Similar kinds of proximity relationships exist among hospitals in numerous large cities throughout the country.
- The design and implementation of such a partnership could provide a template for others;
- Similar planning activities might employ variants of our model, calling on the individual strengths of participating institutions.

Goals

- Provide a mechanism for our community to respond rapidly and successfully to any emergency situation – natural events and acts of terrorism and war;
- Provide a mechanism to integrate the partnership response with those of local, regional and national organizations engaged in emergency preparedness activities in our metropolitan area;
- Develop model structures, enduring materials and performance measures to facilitate the exportation of the model.

Strengths of the Partnership Lie in the Diversity of Its Partners…

- Community Hospital
- Department of Defense Hospital and Reservation
- Department of Defense Medical and Allied Health Professions University
- DHHS Research Hospital and Reservation

Immediate Strengths…

- Proximity;
- Complementary institutional resources;
- Location relative to Washington, D.C.;
- Preexisting emergency preparedness plans;
- The collaborative presence of the physical, human and intellectual resources necessary to be able to coordinate emergency healthcare for our community;
- Emergency preparedness expertise.

Institutional Strengths – Suburban Hospital Healthcare System

- Acute care community hospital with an active emergency room;
- Level II Trauma Center;
- Community preparedness experience;
- Decontamination capacity.

Institutional Strengths – National Naval Medical Center

- Military hospital;
- Extensive decontamination capacity;
- Fenced facility;
- Skilled, well-trained deployable workforce, including a large number of “in-residence” staff
- Extensive preparedness training and practice.

Institutional Strengths – Uniformed University of the Health Sciences

- DoD facility, co-located at NNMC;
- Students trained as EMTs;
- Faculty subspecialty expertise;
- Will assume triage function
- Radiobiology Research Institute
- Center for the Study of Traumatic Stress
- Center for Disaster and Humanitarian Assistance Medicine
- Facility offers unique resources.

Institutional Strengths – Clinical Center, National Institutes of Health

- Fenced facility
- Basic science expertise
- Staff familiar with containment
- Sophisticated diagnostic laboratories
- New, flexible clinical research facility that includes substantial surge capacity
- Skilled campus HAZMAT / decontamination team
- 1240 credentialed physicians representing extensive specialty/subspecialty expertise

Assessing Partnership Needs…

- Command stations that are well-organized and that can integrate community resources expeditiously;
- Pre-formed, integrated, flexible disaster plans that cross normal lines of standard operating procedures;
- Software systems that can integrate a multifactorial emergency response to ensure that survivable patients can be transported to appropriate facilities;
- Appropriate resources to be able to address inevitable complex communication and integration issues.

Program Requirements

- Disaster Modeling
- Surge Capacity and Supply Stockpile
- Decontamination Facilities and Processes
- Transportation
- Communication and Public Education
- Workforce Management
- Information Technology
- Ongoing Training and Assessment
- Program Transferability/Exportability

Program Requirements

- Disaster Modeling
  - Vulnerability assessment
  - Active drills
  - Tabletops
- Surge Capacity and Supply Stockpile
  - Strategic national stockpile
  - DHHS contingency station

Model DHHS Medical Contingency Station

- Surge Capacity
  - Nursing care for stabilized internal medicine, trauma, orthopedics and obstetrical patients
  - Designed space and support for medical evaluations
  - Support for nursing care of patients with special needs
  - Facilities for intravenous therapy and other medical treatments
  - CC would accept transfers from NNMC and Suburban
  - Station provides 250 beds; with this facility, CC could provide surge for at least 300 to 350 patients

DHHS Contingency Station – Implementation

- USPHS Commissioned Corps staff trained in set-up and monitoring – station designed to be available for use in four to six hours
- Stored at NIH
- Medical/surgical supplies, basic support supplies, pharmaceuticals, IVs, etc.
- CC would initially distribute NNMC/Suburban patients into existing clinical space using contingency station resources
  - Single rooms
  - Day hospital rooms

DHHS Contingency Station – Implementation

- If needed, Clinical Center has a gymnasium, a large atrium and numerous open spaces that could be used for surge.
- Staffing
  - CC medical and nursing staff
  - Additional NIH physician/medical staff and scientific expertise
  - NNMC support (Medical Corps, etc.)
  - USUHS faculty, scientists, and medical students

Program Requirements

- Decontamination Facilities and Processes
  - NNMC as primary decon site
  - NIH and Suburban resources will participate, if necessary and available.
- Transportation
  - Assessment of institutional resources (vehicles, transportation routes, etc,)
  - Short-term solutions
  - Construction of connections that can be ‘dedicated’ in an emergency

Program Requirements

- Communication and Public Education
  - Communication with county and regional staff
  - Communication among partners
  - Public education
- Workforce Management
  - "Captive" and volunteer staff
- Information Technology
  - Medical records and patient tracking
  - Inventory management
  - Communication redundancy

Program Requirements

- Ongoing Training and Assessment
  - Conjoint exercises
  - Development of milestones and performance measures
- Program Transferability/Exportability
  - Enduring materials
  - White paper
  - Performance measures

Barriers to Success

- Varied governance
- Disparate missions
- Funding streams
- Code red security
- Credentials and privileges
- Patient tracking
- Information technology platforms

Accomplishments to Date

- Large scale coordinated disaster drill using radiological agent involving local, state and federal emergency preparedness organizations;
- Partnership with local and federal homeland security organizations;
- Educational interface among partners
- Planning for table top drill to include scenario involving biologic agent
- Development of standard processes for selecting patients for surge
- Development of standard records for transferring surge patients

Performance Measures

- Structure
  - MOA
  - Policies and Procedures
  - Equipment availability
- Process/Function
  - Completion of drills
  - Contingency station deployment
- Outcomes
  - Transfer of patients
  - Communication failures

Future Plans

- Contingency Station Implementation
- Readiness Drills
- Export to other “partnerships”